

REMARKS

The Office Action mailed September 19, 2006 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-19 are now pending in this application. Claims 1-7 stand rejected. Claims 8-19 have been withdrawn.

In accordance with 37 C.F.R. 1.136(a), a one month extension of time is submitted herewith to extend the due date of the response to the Office Action dated September 19, 2006, for the above identified patent application from December 19, 2006, through and including December 28, 2006. In accordance with 37 C.F.R. 1.17(a)(1), authorization to charge a deposit account in the amount of \$120.00 to cover this extension of time request also is submitted herewith.

The rejection of Claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over Randolph, Jr. et al. (U.S. Patent 6,453,211) ("Randolph") in view of Applicants' Admitted Prior Art ("AAPA") is respectfully traversed.

Randolph describes a method of repairing the blades (12b) of a blisk (12). The method includes cutting away bend damage (32) of the blade (12b) to form a cutout (46) at a leading edge (42) of the blade (12b). The cutout (46) is then filled with weld material or an insert welded metallic spade to form a weld repair (48) which is larger than a nominal configuration of the blade (12b). Randolph also describes at col. 2, lines 14-19, that "[i]n a recent development program, the weld repair of titanium blisk for a gas turbine compressor application is being explored. Damage to the relatively thin leading or trailing edges of an individual blade may be repaired by removing the damaged portion and weld repairing the remaining cutout." Notably, Randolph does not describe nor suggest removing titanium alloy material along a radially outer tip to form a tip cutback that defines a cut-back depth.

AAPA, paragraph [0005], lines 1-8, describes a method of repairing a turbine compressor blade by mechanically removing a worn and/or damaged tip area and adding a material deposit to the tip area to reform the tip area to the desired dimension. Notably,

AAPA does not describe nor suggest removing titanium alloy material along an entire edge area of a radially outer tip in which the tip edge area extends from a leading edge to a trailing edge of the blade.

Applicants respectfully submit that the Section 103 rejection of the presently pending claims is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Randolph nor AAPA, considered alone or in combination, describe or suggest the claimed combination. Furthermore, in contrast to the assertion within the Office Action, Applicants respectfully submit that it would not be obvious to one skilled in the art to combine Randolph and AAPA, because there is no motivation to combine the references suggested in the art. Additionally, the Examiner has not pointed to any prior art that teaches or suggests to combine the disclosures, other than Applicants' own teaching. Rather, only the conclusory statement that "it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided Randolph Jr. et al. with the repair of the outer tip portion taught by AAPA to provide an effective way of replacing a worn or damaged tip area of the compressor blade" suggests combining the disclosures.

As the Federal Circuit has recognized, obviousness is not established merely by combining references having different individual elements of pending claims. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). MPEP 2143.01. Rather, there must be some suggestion, outside of Applicants' disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the prior art disclosures, nor any reasonable expectation of success has been shown.

Furthermore, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is

impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejection is based on a combination of teachings selected in an attempt to arrive at the claimed invention. Since there is no teaching or suggestion in the cited art for the combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection be withdrawn.

In addition, as is well established, obviousness cannot be established by combining the teachings of the cited art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Neither Randolph nor AAPA, considered alone or in combination, describe or suggest removing titanium alloy material an entire edge area of a radially outer tip in which the edge area extends from a leading edge to a trailing edge of the blade..

Moreover, and to the extent understood, neither Randolph nor AAPA, considered alone or in combination, describe or suggest the claimed invention. Specifically, Claim 1 recites a method of repairing a gas turbine engine compressor blade airfoil in which the method includes "removing titanium alloy material from along leading and trailing edges of the airfoil, and along an entire edge area of a radially outer tip of the airfoil to form respective leading edge, trailing edge, and tip cut-backs which each define cut-back depths, wherein the edge area extends from the leading edge to the trailing edge"

Neither Randolph nor AAPA, considered alone or in combination, describe or suggest a method of repairing a gas turbine engine compressor blade airfoil as recited in Claim 1. More specifically, neither Randolph nor AAPA, considered alone or in combination, describe or suggest a method which includes removing titanium alloy material from along an entire edge area of a radially outer tip of the airfoil, wherein the edge area extends from the leading edge to the trailing edge of the airfoil. Rather, in contrast to the present invention, Randolph describes removing damaged leading and trailing edge portions, and AAPA describes

removing a damaged tip area from a limited portion of the tip area and adding a material deposit to only that portion of the tip area. Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Randolph in view of AAPA.

Claims 2-7 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-7 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-7 likewise are patentable over Randolph in view of AAPA.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 1-7 be withdrawn.

The rejection of Claims 1-7 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-7, and 14 of U.S. Patent 6,532,656 in view of Randolph is respectfully traversed.

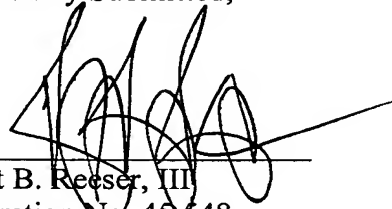
Applicants respectfully submit that Claims 1-7 of the present application have not been finalized, because there has been no indication that these claims contain allowable subject matter. As such, Applicants submit that the obvious-type double patenting rejection is only a provisional rejection. Accordingly, Applicants respectfully request that the obvious-type double patenting rejection of Claims 1-7 be withdrawn at this time.

Express Mail No.: EV 918277981 US

134354
PATENT

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'R. B. Reeser, III', written over a horizontal line.

Robert B. Reeser, III
Registration No. 45,548
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070